

Claims

- 1 1. A plastic control plate of a hydraulic gearbox control device in a motor vehicle,
2 comprising
3 - at least one channel which runs through the plastic control plate and is used for
4 carrying a cooling medium, and
5 - a heat conduction body which is at least partly integrated in the plastic control plate
6 and is arranged directly adjacent to the channel.
- 1 2. The plastic control plate as claimed in Claim 1, wherein the heat conduction
2 body is a metal plate, in particular an aluminum plate.
- 1 3. The plastic control plate as claimed in Claim 1, wherein the heat conduction
2 body is designed in such a way that the cooling medium, in particular a hydraulic fluid,
3 flows against it.
- 1 4. The plastic control plate as claimed in Claim 1, wherein a flat area of the heat
2 conduction body is designed as a wall area of the channel.
- 1 5. The plastic control plate as claimed in Claim 1, wherein the heat conduction
2 body is designed in the form of a U, wherein the inner sides of the U form wall areas
3 of the channel.
- 1 6. The plastic control plate as claimed in Claim 1, wherein the upper surface of
2 the plastic control plate is flush with the upper surface of the heat conduction body.

1 7. An arrangement comprising a plastic control plate and a gearbox control
2 electronics system, wherein the plastic control plate comprises:
3 - at least one channel which runs through the plastic control plate and is used
4 for carrying a cooling medium, and
5 - a heat conduction body which is at least partly integrated in the plastic control
6 plate and is arranged directly adjacent to the channel, and wherein
7 the gearbox control electronics system, in particular a substrate carrying the electronic
8 components of said system, is arranged directly on the upper surface of the heat
9 conduction body.

1 8. The arrangement as claimed in Claim 7, wherein the gearbox control
2 electronics system is electrically contacted via an electrical circuit board, in particular
3 a flexible circuit board.

1 9. The arrangement as claimed in Claim 7, wherein the gearbox control
2 electronics system is electrically contacted via a stamped-grid arrangement, which
3 extends partly over the upper surface of the plastic control plate and partly over the
4 upper surface of the heat conduction body.

1 10. The arrangement as claimed in Claim 7, wherein the heat conduction body is a
2 metal plate, in particular an aluminum plate.

1 11. The arrangement as claimed in Claim 7, wherein the heat conduction body is
2 designed in such a way that the cooling medium, in particular a hydraulic fluid, flows
3 against it.

1 12. The arrangement as claimed in Claim 7, wherein a flat area of the heat
2 conduction body is designed as a wall area of the channel.

- 1 13. The arrangement as claimed in Claim 7, wherein the heat conduction body is
2 designed in the form of a U, wherein the inner sides of the U form wall areas of the
3 channel.
- 1 14. The arrangement as claimed in Claim 7, wherein the upper surface of the
2 plastic control plate is flush with the upper surface of the heat conduction body.

1 15. A gearbox control system comprising:
2 - a plastic control plate
3 - at least one channel which runs through the plastic control plate for carrying a
4 cooling medium,
5 - a heat conduction body which is at least partly integrated in the plastic control plate
6 and is arranged directly adjacent to the channel,
7 - a gearbox control circuit arranged on a substrate which is arranged directly on the
8 upper surface of the heat conduction body.

1 16. The gearbox control system as in Claim 15, wherein the gearbox control circuit
2 is electrically contacted via an electrical circuit board, in particular a flexible circuit
3 board.

1 17. The gearbox control system as in Claim 15, wherein the gearbox control
2 system is electrically contacted via a stamped-grid arrangement, which extends partly
3 over the upper surface of the plastic control plate and partly over the upper surface of
4 the heat conduction body.

1 18. The gearbox control system as in Claim 15, wherein the heat conduction body
2 is a metal plate, in particular an aluminum plate.

1 19. The gearbox control system as in Claim 15, wherein the heat conduction body
2 is designed in such a way that the cooling medium, in particular a hydraulic fluid,
3 flows against it.

1 20. The gearbox control system as in Claim 15, wherein a flat area of the heat
2 conduction body is designed as a wall area of the channel.

1 21. The gearbox control system as in Claim 15, wherein the heat conduction body
2 is designed in the form of a U, wherein the inner sides of the U form wall areas of the
3 channel.

- 1 22. The gearbox control system as in Claim 15, wherein the upper surface of the
- 2 plastic control plate is flush with the upper surface of the heat conduction body.